

Translation

PATENT COOPERATION TREATY

PCT/FR2003/001946



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference DOG/VP/41612	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/FR2003/001946	International filing date (day/month/year) 24 juin 2003 (24.06.2003)	Priority date (day/month/year) 24 juin 2002 (24.06.2002)
International Patent Classification (IPC) or national classification and IPC B01F 13/00		
Applicant BIOMÉRIEUX		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 27 octobre 2003 (27.10.2003)	Date of completion of this report 08 November 2004 (08.11.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR2003/001946

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages \_\_\_\_\_ 1-18 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_ 1-21 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
pages \_\_\_\_\_ 1/5-5/5 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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## III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 14-21

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 14-21  
are so unclear that no meaningful opinion could be formed (*specify*):

See separate sheet

☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. \_\_\_\_\_.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

Supplemental Box  
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III.

### Clarity

Claims 14 to 21, which relate to the use of a fluidic device, attempt to define said use in terms of method implementation features (cf. the PCT International Preliminary Examination Guidelines, point III-4.9). This leads to a lack of clarity as far as the category of the claims is concerned. Consequently, claims 14 to 21 fail to comply with the requirements of PCT Article 6 in so far as the subject matter for which protection is sought has not been clearly defined.

Furthermore, independent claims 14, 15 and 18, considered as a whole, are unclear. Because of the plurality of independent claims, it is difficult if not impossible to determine the subject matter for which protection is sought. An independent claim must explicitly specify all of the essential features required for the definition of the invention. Since claims 14, 15 and 18 relating to the use of a fluidic device contain different technical features, it is impossible to determine clearly which technical features are essential for the definition of the invention. It follows that claims 14, 15 and 18 fail to comply with the requirements of PCT Article 6.

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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-13	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-13	NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims		NO

### 2. Citations and explanations

Reference is made to the following documents:

D1: US-B1-6 193 471 (PAUL CARLTON H) 27 February  
2001 (2001-02-27)

D2: US-A-6 043 080 (FODOR STEPHEN P A ET AL) 28  
March 2000 (2000-03-28)

D3: WO 99 39120 A (UNIV PITTSBURGH) 5 August 1999  
(1999-08-05)

#### Novelty

D1 is considered to be the most relevant prior art. D1 (column 7, line 20 to column 8, line 23, figures 4 to 7) describes an operating cavity (94) and two gas trapping chambers (28). The subject matter of claim 1 differs from document D1 in that the fluidic device has heat exchange means for controlling the gas pressure.

It follows that the subject matter of claim 1 is novel (PCT Article 33(2)).

#### Inventive step

The problem that the present invention is intended to

solve is that of achieving the function of isolating a volume of liquid in an operating cavity using substantially simplified fluidic means (page 3, lines 17-21).

The solution proposed in claim 1 of the present application involves heat exchange means with a gas trapping chamber. Nothing in claim 1 makes it possible to determine how the heat exchange means solve the stated problem addressed in the description, meaning that the subject matter of claim 1 is not inventive.

Furthermore, the use of heat exchange means for controlling the pressure of a gas is part of the general knowledge of a person skilled in the art of fluidic devices. The use of heat exchange means is merely one of a plurality of obvious alternatives that a person skilled in the art might select when seeking to control the pressure of a gas, without an inventive step being involved.

The use of heat exchange means for controlling the pressure of a fluid in a fluidic device is also known from the prior art, such as documents D2 (column 24, lines 6-27) and D3 (page 4, line 33 to page 5, line 10), and the application does not indicate whether said means lead to a novel or surprising effect.

Similarly, nothing in the description or the claims makes it possible to determine how the features in dependent claims 2 to 13 enable the stated problem addressed in the description to be solved.

It follows that claims 1 to 13 are not inventive (PCT Article 33(3)).